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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,279	08/16/2000	Yogesh S. Sanghvi	ISIS-4407	3043

7590

07/12/2002

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EXAMINER

EPPS, JANET L

ART UNIT

PAPER NUMBER

1635

DATE MAILED: 07/12/2002

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/640,279

Applicant(s)

SANGHVI ET AL.

Examiner

Richard Schnizer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-78 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

- I. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-41, drawn to a method for preparing an oligonucleotide compound, wherein said compound comprises an X2 group that is O, wherein said method comprises treating an extended compound with a mixture comprising an oxidizing reagent and a capping reagent in one step, classified in class 536, subclass 22.1.
 - II. Claims 1-41, drawn to a method for preparing an oligonucleotide compound, wherein said compound comprises an X2 group that is S, wherein said method comprises treating an extended compound with a mixture comprising an oxidizing reagent and a capping reagent in one step, classified in class 536, subclass 22.1.
 - III. Claims 42-61, drawn to a method for preparing an oligomeric compound, wherein said method comprises treating an extended compound with dimethylthiuram disulfide in a step separate from the capping step, classified in class 536, subclass 22.1.
 - IV. Claims 62, drawn to a method of preparing an oligomeric compound wherein X2 is O, and wherein at least one set of nucleoside monomers are connected via the 2' and 5' positions of the ribose sugar moieties of said monomers, classified in class 536, subclass 22.1.
 - V. Claims 62, drawn to a method of preparing an oligomeric compound wherein X2 is S, and wherein at least one set of nucleoside monomers are connected via the 2'

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and 5' positions of the ribose sugar moieties of said monomers, classified in class 536, subclass 22.1.

VI. Claims 63-78, drawn to a synthetic process for forming a precipitate, classified in class 585, subclass 833.

The inventions are distinct, each from the other because of the following reasons:

2. The inventions of Groups I and II are separate and distinct since they are directed to the synthesis of chemically and structurally distinct oligomeric compounds, specifically oligomers comprising phosphodiester (Group I) and oligomers comprising phosphorothioate (Group II). The method for synthesizing phosphorothioate oligomers would require chemical reactants that are separate and distinct from those reactants required to produce an oligomer comprising phosphate esters.

3. The inventions of Groups I-II are patentably distinct from the invention of Group III since the method for preparing an oligomeric compound of Group III recites a separate oxidizing and capping step, and the method of Groups I-II recite treatment of an extended compound with a mixture whereby oxidizing and capping of the compound occurs in one step.

4. The inventions of Groups I-III are patentably distinct from the inventions of Groups IV and V since the method of Groups I-III are directed to the synthesis of oligomeric compounds wherein the nucleoside monomers of said compound are linked via a phosphate ester linkage between the 5' and 3' ends of the sugar moieties of each nucleoside monomer. In contrast, the inventions of Groups IV and V are directed to methods for the preparation of oligomeric compounds wherein at least one set of nucleoside monomers are connected via the 2' and 5' positions of the ribose sugar moieties of said nucleoside monomers.

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5. The inventions of Groups IV and V are separate and distinct since they are directed to the synthesis of chemically and structurally distinct oligomeric compounds, specifically oligomers comprising phosphodiester linkages, Group IV, and oligomers comprising phosphorothioate linkages, Group V. The method for synthesizing phosphorothioate oligomers would require chemical reactants that are separate and distinct from those reactants required to produce an oligomer comprising phosphodiester linkages.

6. The inventions of Groups I-V are separate and patentably distinct from the invention of group VI since the invention of group VI is not directed to a method for the synthesis of an oligomeric compound, therefore this method has a different objective from the other methods. Additionally, the method of Group VI recites different starting materials. Moreover, the method of Group VI comprises different steps from those steps recited in the methods according to Groups I-V.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

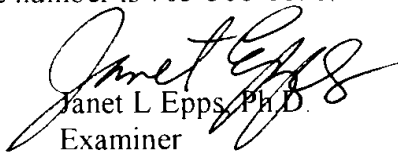
8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet L Epps, Ph.D. whose telephone number is 703-308-8883. The examiner can normally be reached on M-T, Thurs-Friday 8:30AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John LeGuyader can be reached on (703)-308-0447. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-746-5143 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.


Janet L Epps, Ph.D.
Examiner
Art Unit 1635

JLE
July 10, 2002